



Flying

COMBAT SORTIE GENERATION

COMPLIANCE WITH THIS INSTRUCTION IS MANDATORY

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This supplement implements and extends the guidance of AFRESR 60-6, 1 June 1993. It also establishes operating procedures and requirements covering integrated combat turnaround (ICT) procedures for the wing in support of periodic and surge exercises. It is applicable to all personnel within the wing who direct, control, supervise, or participate in aircraft combat turnarounds. Insert this supplement as Chapter 7 to AFRESR 60-6.

SUMMARY OF REVISIONS

*Paragraph 7.2. deleted requirement to develop local MOIs for ICTs. Changed requirement of paragraph 7.5. aircraft munitions loading or ICT operations involving live munitions will only be performed on sited locations approved by the Department of Defense Explosive Safety Board (DDESB). Paragraph 7.6.2. deleted tempilstik requirement per engineering disposition. Paragraph 7.7.2.1. deleted requirement to have intelligence representative for debriefing. This revision changed functional address from Maintenance Operations Center (MOC) to Maintenance Control Function (MCF) and establishes Debrief/Dispatch Section (DDS). This revision also moves the MCC to combined Command Post (CP). **Attachments 2 and 3**, paragraphs A2.2.6. and A3.2.1. fire truck available for 3 minute response. **Attachment 3**, paragraph A3.3.9. change wooden step ladder from six feet to four feet. Delete fast fix area. An * asterisk indicates revisions from previous edition.

7.1. Responsibilities. Commanders, maintenance officers, and supervisors ensure compliance with the procedures in this supplement.

***7.2. Explosive Limits.** Do not exceed posted net explosive weight (new) Munitions quantities will not exceed quantity distance or explosion limit criteria. Inert training munitions will be used to maximum extent possible. Returned ordnance will be in addition to limits set above.

7.3. Personnel Limits/Requirements. Personnel limits are set forth in **Attachment 2**.

7.4. Equipment Requirements. Equipment requirements are set forth in **Attachment 3**.

***7.5. Location of Operations.** Aircraft munitions loading or ICT operations involving live munitions will only be performed on sited locations approved by the Department of Defense Explosive Safety Board (DDESB).

7.6. Safety Precautions. Consolidated efforts such as an ICT exercise promotes a congested, highly vulnerable environment for mishaps/incidents. The large numbers of personnel, equipment, vehicles and munitions are compounded with running/taxiing aircraft. Extreme caution must be exercised by all personnel to reduce the mishap potential supervisors should actively integrate operational risk management principles into ICT operations to reduce or manage high risk factors. During all operations, safety is paramount. Compliance with technical data and safety directives will not be compromised. Some specific instructions (but not limited to) are: All personnel involved in the ICT will be given safety and emergency procedure briefings by the combat turn director (CTD) prior to the first ICT operation. See **Attachment 4**.

7.7. Sequence of Operations:

7.7.1. General Procedures:

7.7.1.1. The wing ICT operations utilize simulated shelters, as prescribed by present mission commitments.

7.7.1.2. The operation liaison officer (OLO) with the assistance from the fighter squadron maintenance (FSM) specifies cursory location, and shelters fast fix and hard fix areas for combat turnaround operations.

7.7.1.3. During surge exercises, aircraft used for ICTs will be mission capable with functionally checked weapons systems. For static ICTs, the aircraft used may be non-mission capable for maintenance (NMCM) provided the weapons systems have been functionally checked and other discrepancies do not compromise safety. This allows the maximum use of aircraft for training purposes only.

7.7.1.4. Aircraft can be towed/taxied to the ICT area.

7.7.1.5. Aircraft and munitions configurations are prescribed by the unit committed munitions list (UCML).

7.7.1.5.1. Inert training munitions will be used to maximum extent possible.

7.7.1.6. Do not use ICTs when using sortie surge as a scheduling technique unless the munitions involved are listed as primary on the UCML.

7.7.2. ICT Responsibilities/Procedures:

*7.7.2.1. The fighter squadron (FS) provides pilots to support exercises and scheduled ICT operations. The squadron supplies pilots with chemical warfare (CW) gear (if applicable) prior to transporting them to the ICT spot according to **Attachment 5**.

7.7.2.2. Fighter squadron operations and maintenance schedulers coordinate for the ICT exercises with affected base units and other participants, to include reflecting the ICT schedule and participants in the weekly flying schedule. ICTs using live munitions will coordinate through Hill AFB Airfield Operations.

*7.7.2.3. MCF or DDS ensures timely notification of ICT participants.

7.7.2.3.1. MCF or DDS notifies the host base security forces to provide security to the isolation/designation area if the resource (F-16) is outside an already established restricted area as prescribed by AFI 31-101V1, *Air Force Physical Security Program*, as supplemented.

*7.7.2.4. MCF or DDS notifies the base fire department to ensure a fire truck is available for emergency response.

7.7.2.5. Pilots perform the ICT operation as outlined in **Attachment 5**, if applicable.

7.7.2.6. QA monitors and evaluates ICT operations to the greatest extent possible.

7.7.2.7. The weapons standardization section evaluates as many operations as possible and routes AF Form 2419, **Routing and Review of Quality Control Reports**, to all appropriate areas. An oral critique will be held with all participants after the exercise is complete.

7.7.2.8. Fighter Squadron Maintenance (FSM):

7.7.2.8.1. Designates an area for ICT training. Marks the shelter area (if applicable) using stanchions and rope, traffic cones, or in some other practical manner.

7.7.2.8.2. Ensures the fighter squadron is provided information as required to ensure a coordinated ICT operation is conducted.

7.7.2.8.3. Ensures aircraft is properly configured two hours prior to scheduled turn time.

7.7.2.8.4. Provides personnel support as prescribed in **Attachment 2**.

7.7.2.8.5. Ensures all 2A3X3B, Tactical Aircraft Maintenance Craftsman, F-16 and/or maintenance personnel are qualified/certified on the tasks of the ICT operations prior to the ICT.

7.7.2.8.6. Ensures the required equipment is in place one hour prior to the start of the ICT exercise.

*7.7.2.8.7. Provides maintenance debriefing to pilots during training and sortie surge exercises.

7.7.2.8.8. Ensures personnel perform ICTs with chemical warfare gear (full/partial as authorized) and as tasked during higher headquarters inspections and sortie surges. This requires adequate coordination with related agencies to ensure a sufficient amount of CW gear is available whenever needed for all personnel tasked.

7.7.2.8.9. Weapons Flight. Ensures that all munitions are downloaded and properly secured on the munitions trailer at the completion of the ICT operation. Removes debris (arming wire, hardware, swivels, etc) from the trailer bed. Informs munitions control of any unserviceable munitions or components. Properly tags unserviceable items.

7.7.2.8.10. Ensures appropriate loading personnel are qualified/certified on ICT procedures.

7.7.2.9. Maintenance Squadron (MXS):

7.7.2.9.1. Provides and delivers munitions for ICTs.

7.7.2.9.2. Provides aerospace ground equipment (AGE) support.

7.7.2.10. Combat Turn Director (CTD):

7.7.2.10.1. CTD is the "on scene authority" who is responsible for the combat turn area (CTA).

*7.7.2.10.2. Uses a multi-channel maintenance net radio to maintain contact with MCF or DDS during all phases of the ICT operation.

7.7.2.10.3. Immediately stops any operation that cannot be completed safely. Resume the ICT operation to its completion when the safety discrepancy has been corrected.

7.7.2.10.4. Manages the ICT area and ensures a smooth flowing operation.

7.7.2.10.5. Informs the aircraft turn supervisor (ATS) when aircraft are proceeding to their turn sites.

*7.7.2.10.6. Informs MCF or DDS of ICT start time (first chock) and the time the pilot accepts the aircraft.

7.7.2.11. Aircraft Turn Supervisor (ATS):

7.7.2.11.1. Supervises all aspects of the ICT operation and maintains communication with the CTD.

7.7.2.11.2. Ensures equipment is available, serviceable and properly positioned at the ICT site one hour prior to the ICT operation.

7.7.2.11.3. Informs the CTD of all problem areas.

7.7.2.11.4. Stops the operation when an unsafe condition exists and reports it to the CTD.

7.7.2.11.5. Notes the start time (first chock), delays, pilots acceptance time, and informs the CTD.

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Attachment 2**PERSONNEL REQUIREMENTS**

NOTE: Personnel requirements are minimums.

A2.1. Dearm/Cursory Area:

A2.1.1. One qualified 2A353B/73B.

A2.1.2. One certified/qualified load crew/subcrew. The subcrew will be composed of not less than two 2W1X1, Aircraft Armament Systems, personnel qualified for the specific task. (One subcrew member must be a five-level and checklist qualified.)

A2.2. Combat Turn Area:

A2.2.1. One CTD. The number of aircraft a CTD can effectively supervise in a CTA, will be determined by the CTD and OLO.

A2.2.2. An ATS will only supervise one ICT at a time.

A2.2.3. One weapons load crew for each two active ICT sites.

A2.2.4. Two maintenance personnel for each two active ICT sites. One will be a qualified crew chief. Both maintenance personnel will be qualified in the maintenance tasks being performed, such as servicing fuel, and liquid oxygen (LOX).

A2.2.5. One refueling operator for each active ICT site.

*A2.2.6. Fire truck to be available for three minute response.

***A2.3. Hard Fix Area:**

A2.3.1. Maintenance personnel as required.

A2.3.2. Munitions loading personnel as required.

NOTE: During surge operations, specialist and weapons personnel will be in a designated radio controlled vehicle and assigned to a position on the flightline to respond to "red ball" requests.

NOTE: The above requirements plus two authorized observers or evaluators constitute personnel limitations in each of the areas.

NOTE: Cursory can be performed in the CTA.

Attachment 3

EQUIPMENT REQUIREMENTS

The following is a list of minimum equipment requirements for an aircraft combat turnaround training exercise.

A3.1. Dearm/Cursory Area. Equipment requirements for cursory when performed in a separate area from the CTA.

A3.1.1. Weapons flight/aircraft flight composite tool kit (CTK) as required.

A3.1.2. Comm cord/headset.

A3.1.3. Safety devices as required.

A3.2. Combat Turn Area:

*A3.2.1. One crash/fire fighting vehicle for three minute response.

A3.2.2. Ear protection for all personnel.

A3.2.3. Appropriate safety pins/devices.

A3.2.4. Multi-channel radio(s) (non-TAC, if possible) for CTDs communication.

A3.2.5. One R-11 or equivalent fuel truck per active ICT spot.

A3.2.6. Spare support equipment (SE) - power unit A/M32A-60, air conditioner C-10, MJ-1 and/or MHU-83, low pack air compressor, C-1 or B4 maintenance stand, LOX converter, halon bottle, hydraulic service cart, engine oil service cart, (spare equipment must not obstruct fuel truck entry/exit).

A3.2.7. Munitions trailers (as required).

A3.2.8. 5060 test set.

A3.3. Turnaround Site:

A3.3.1. Fire extinguisher - 150 lbs. 1211 halon or equivalent, as required.

A3.3.2. Weapons safety and landing gear pins (as required).

A3.3.3. Weapons, APG CTK.

- A3.3.4. Headset and intercomm cord.
- A3.3.5. Static ground wire.
- A3.3.6. Two sets of aircraft tire chocks.
- A3.3.7. Aircraft tow bar (as required).
- A3.3.8. Aircraft boarding ladder.
- A3.3.9. Wooden step ladder (five feet).
- A3.3.10. Two NF-2 lite carts (as required) night operation.
- A3.3.11. Bomb Y stands/munition trailers (as required).
- A3.3.12. Required munitions and components.
- A3.3.13. Applicable technical data.
- A3.3.14. MJ-1 or MHU-83, as required.
- A3.3.15. JOAP samples kit.

***A3.4. Hard Fix Area.** Above equipment plus the following:

- A3.4.1. Two nose and two main tires and wheels, one axle jack, and tire change CTK.
- A3.4.2. Hydraulic, oil, nitrogen and LOX servicing carts.
- A3.4.3. Power unit A/M32A-60 and C-10 air conditioner.
- A3.4.4. Any remaining equipment necessary to complete required maintenance actions.

Attachment 4

INTERGRATED COMBAT TURNAROUND

Combat turnaround is an integrated process by which an aircraft is recovered and launched in a minimum amount of time through simultaneous actions to service, load, and repair. The concept involves a quick check or cursory inspection in the dearm area then taxiing to one of several parking areas; the combat turn area (no maintenance required), the quick fix area (minor maintenance required/anticipated) or the hard broke area (maintenance duration anticipated more than 4 hours). Munitions requirements will normally be designated by the turn director. Concurrent refueling and weapons loading are authorized. A fire truck must be available for emergency response coverage. Upon notification of combat turnaround notify the following agencies:

OG AND MCF/DDS _____.

FIRE DEPARTMENT _____.

MUNITIONS CONTROL _____.

FLIGHT LINE SUPERVISOR _____.

POL _____.

SECURITY POLICE _____ (as required).

OPERATIONS CONTROL CENTER _____ (as turns are completed).

NOTE: IN CASE MUNITIONS ACCIDENTS/INCIDENTS NOTIFY MAINTENANCE CONTROL FUNCTION OR DEBRIEF/DISPATCH SECTION (DDS) 7-2559, MUNITIONS CONTROL 7-7064 OR CONTACT BY RADIO. MCF.DDS WILL EXERCISE EMERGENCY ACTION CHECKLISTS.

NOTE 1: Only power off maintenance, such as component replacement (no jacking) may be performed during the period of simultaneous refuel and munitions loading.

NOTE 2: Normally a maintenance status code will be received by the MCC and debrief/dispatch section prior to landing. The cursory inspection immediately after landing will reaffirm the maintenance status code as well as providing an overall visual inspection.

CODE I: No discrepancies.

CODE II: Minor discrepancies.

CODE II Alpha: Air-to-air weapons delivery write-up.

CODE II Bravo: Air-to-ground weapons delivery write-up.

CODE II Charley: Write-up that requires discussion with maintenance and operations personnel to determine true capability of aircraft.

CODE III: Non-flyable write-up.

CODE IV: Suspected or known radiological, chemical, or biological contamination.

CODE V: Suspected or known battle damage.

NOTE 3: If any towing actions are required, the pilot should remain in the cockpit until parking is complete.

NOTE 4: Halon bottles may be replaced.

NOTE 5: Conduct LOX servicing separately, LOX bottles may be replaced.

NOTE 6: Utilize only power units designated by powered AGE (spark check C/W) for concurrent refuel and munitions loading.

NOTE 7: Aircraft position should present minimum hazard in event of accidental gun firing.

Attachment 5

PILOT CHEM WARFARE ICT PROCEDURES

A5.1. Report to life support 50 minutes prior to the time the aircraft is required at the turn spot.

A5.2. Pilot is fitted with the following items:

A5.2.1. Helmet.

A5.2.2. Mask.

A5.2.3. Not required for combat edge aircraft. (Not required if wearing a combat edge vest)

A5.2.4. Flight gloves.

A5.2.5. Overboots.

A5.2.6. Overcape is worn if under condition black.

A5.2.7. Overcape is carried by pilot if leaving life support under condition yellow and donned if conditions change.

A5.2.8. Other standard flight gear (including vest).

A5.2.8. A clean set of overboots and overcape are carried by the pilot in a helmet bag packet for use after landing.

A5.3. Pilot is transported to tab vee by covered van.

A5.4. If pilot is wearing overcape, it is removed by the crew chief after the pilot is in the tab vee (if applicable).

A5.5. Pilot preflights the aircraft.

A5.6. The pilot enters the cockpit in the following manner:

A5.6.1. Standing on the ground at the base of the ladder, the pilot raises one foot to allow the crew chief to remove the overboot.

A5.6.2. Once the overboot is removed, place the uncovered boot on the ladder and raise the other foot to allow the crew chief to remove that overboot. Both feet should be on the ladder after the overboots are removed. Do not step back onto the concrete.

A5.6.3. Proceed up the ladder and enter the cockpit in normal manner.

A5.7. Start and taxi aircraft according to normal ICT.

A5.8. After taxing aircraft or returning from a mission, position the aircraft as directed by crew chief, maintenance performs hot brakes and tire rollover check. They will then install gear and EPU pins.

A5.9. When communication is established with the crew chief verify items found in checklist T.C. IF-16C-33-1-4CL.

A5.10. Shut down engine at the direction of crew chief, leave battery on and canopy closed until stopped inside the tab vee. (If applicable.)

A5.11. Open canopy and unstrap normal.

A5.12. Give clean overboots and overcape to crew chief.

A5.13. While still on ladder, crew chief assists pilot in donning overboots prior to stepping on concrete.

A5.14. If condition black, don overcape prior to leaving tab vee.

OPS NOTE: If the pilot has been exposed to condition black, the pilot needs to proceed immediately to decon. The pilot who is flying the aircraft next needs to be at the turnaround site when the aircraft is parked.